

**REMARKS**

Claims 1-14 and 16-36 are pending in the current application. In addition to the arguments and amendments presented in the Response filed on November 5, 2008, Applicants respectfully submit the following arguments and further amendments to claim 28.

**Claim Rejections – 35 U.S.C. § 112**

Claims 16, 35 and 36 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Further, the Examiner appears to reject claims 1, 8 and 28 under §112 as well. Applicants respectfully traverse these rejections.

**Claims 1 and 28**

The Examiner asserts the term “random” renders claim 1 and 28 indefinite. Claims 1 and 28 have been amended and the term “random” is no longer present. Accordingly the Examiner’s basis for objecting to claims 1 and 28 is moot.

**Claim 8**

The Examiner asserts the terms “the one side” and “the other side” lack antecedent basis. Claims 8 has been emended and the terms “the one side” and “the other side” have been removed. Accordingly the Examiner’s basis for objecting to claim 8 is moot.

**Claims 35 and 36**

With respect to claims 35 and 36, the Examiner asserts the terminology "such that" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention §2173.05(d). MPEP §2173.05(d) (8<sup>th</sup> ed., Rev. 7, 2008) states:

Description of examples or preferences is properly set forth in the specification rather than the claims. If stated in the claims, examples and preferences >may< lead to confusion over the intended scope of a claim. In those instances where it is not clear whether the claimed narrower range is a limitation, a rejection under **35 U.S.C. 112**, second paragraph should be made. The examiner should analyze whether the metes and bounds of the claim are clearly set forth. Examples of claim language which have been held to be indefinite because the intended scope of the claim was unclear are:

(A) "R is halogen, for example, chlorine";

(B) "material such as rock wool or asbestos" *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1949);

(C) "lighter hydrocarbons, such, for example, as the vapors or gas produced" *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949); and

(D) "normal operating conditions such as while in the container of a proportioner" *Ex parte Steigerwald*, 131 USPQ 74 (Bd. App. 1961).

>The above examples of claim language which have been held to be indefinite are fact specific and should not be applied as *per se* rules. See MPEP § **2173.02** for guidance regarding when it is appropriate to make a rejection under 35 U.S.C. **112**, second paragraph.<

Applicants respectfully submit MPEP §2173.05(d) relates only to **exemplary language** like "such as" and "for example". The Examiner appears to be confusing the phrase "such as", which is listed as an example of exemplary language in MPEP §2173.05(d), with the phrase "such that" (emphasis added), the definite language found in claims 35 and 36 which is not exemplary in nature and thus not defined as indefinite according to the MPEP §2173.05(d).

Therefore, Applicants respectfully request the rejections of claims 1, 8, 16, 28, 35 and 36 under 35 U.S.C. §112 be withdrawn.

**Claim Rejections – 35 U.S.C. § 103 - Yanagi in view of Nomura**

Claims 1, 2, 6, 8, 10, 12, 13, 21, 28 and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagi et al. (US 2002/0063669, hereinafter “Yanagi”) in view of Nomura et al. (US 6,181,310, hereinafter “Nomura”). Applicants’ respectfully traverse this rejection.

Applicants respectfully submit neither Yanagi nor Nomura teach “changing the common electrode voltages depending on a position of the pixels in the liquid crystal panel so as to decrease the difference of luminance of pixels” as claim 1 requires. The Examiner asserts Yanagi teaches a voltage supplying circuit, depicted in FIG. 1 of Yanagi, capable of adjusting a common electrode voltage  $V_{com1}$ , depicted in FIG. 13 of Yanagi.

Yanagi et al. paragraph [0047] says that in frame inversion drive, due to the parasitic capacitance that develops in the display cell, the effective value of the voltage applied across the liquid crystal falls and that the effects vary from line to line of the display screen and that this leads to irregular brightness of the display image.

Applicants respectfully submit, paragraph [0102] of Yanagi states that a non-scan period (second and third periods  $T_{b2}$ ,  $T_{c2}$ ) equal to or longer than the scan period is provided immediately following the scan period (first period  $T_{a2}$ ) and that because a standard drive voltage in the display cells during the non-scan period described in paragraph [0047], the difference in effective value of the voltage level applied to the display cell P between the top and bottom rows of the display screen is remarkably reduced, practically eliminating differences in brightness between the top and bottom rows. Here, “effective value of the voltage level” refers to a driving voltage

which is determined by a signal voltage and a common electrode voltage. This cited reference means reduction of difference of the driving voltage.

On the contrary, claim 1 does not refer to adjusting a length of the non-scan period but recites “adjusting the common electrode voltages”. Further, claim 1 does not refer to reducing a difference of the driving voltage but recites “changing the common electrode voltages depending on a position of the pixels in the liquid crystal panel so as to decrease the difference of luminance of pixels”. Claim 1 aims provision of proper difference for the driving voltage (by adjusting the common electrode voltage) in order to decrease difference of luminance for liquid crystal which has an asymmetric characteristic, that is, a characteristic that difference of luminance of pixels occurs depending on an observation direction. Yanagi does not teach varying a common electrode voltage in such a manner. Specifically, Applicants note paragraph [0128] of Yanagi states only that first and second electrodes 13a and 13b are applied common signals Vcom1 and Vcom2 that are in phase but of different polarities as shown in FIG. 13 of Yanagi and that therefore the first electrodes 13a and the second electrodes 13b are arranged alternately, to which the common signals Vcom1, Vcom2 are applied respectively. Thus, Yanagi simply teaches that common electrode voltages Vcom1 and Vcom2 have polarities opposite to one another. Yanagi does not teach “changing the common electrode voltages depending on a position of the pixels in the liquid crystal panel so as to decrease the difference of luminance of pixels” as claim 1 requires. Nomura likewise fails to teach this limitation.

Accordingly, neither Yanagi, nor Nomura, alone or in combination, teach each of the limitations in claim 1, or any of the claims depending from claim 1, as is required to support a rejection under §103.

Further, claim 28 contains limitations at least somewhat similar to those of claim 1. Accordingly, at least in view of the similarities between claim 28 and claim 1,

neither Yanagi, nor Nomura, alone or in combination, teach each of the limitations in claim 28, or any of the claims depending from claim 28, as is required to support a rejection under §103.

Additionally, Applicants specifically address the Examiner's rejection of dependent claim 2. Applicants respectfully submit, neither Yanagi, nor Nomura, alone or in combination teach "respectively adjusting the common electrode voltages so that the common electrode voltages are adjusted independently for each group" as claim 2 requires. In rejection claim 2 the Examiner refers to the common signals Vcom1 and Vcom2 of Yanagi as teaching adjusting common electrode voltages independently. Applicants note, Yanagi teaches supplying signals Vcom1 and Vcom2 from each of electrodes 13a and 13b, respectively, to alternating signal lines S(i) of a liquid crystal panel 1 (Yanagi: FIG 12; [0128]). However, Yanagi fails to teach a common electrode voltage supplying circuit **capable of respectively adjusting** the common electrode voltages so that the common electrode voltages are **adjusted independently for each group** as claim 1 requires. Specifically, nothing in Yanagi teaches that signals Vcom1 and Vcom2 are adjusted independently for each group. On the contrary, Yanagi teaches the two electrodes 13a and 13b, from which signals Vcom1 and Vcom2 are supplied, are formed by dividing a single electrode 13 suggesting that independent adjustment is not possible at least because the signals are not even independently supplied. Further, Yanagi teaches signals Vcom1 and Vcom2 are related to each other by being identical in phase and opposite in polarity (Yanagi: [0128]). This is further illustrated by FIG. 13 of Yanagi which depicts signals Vcom1 and Vcom2 not as two independent signals, but as **mirror images** of each other identical in phase, period and amplitude, and directly opposite in polarity. Accordingly, by requiring this relationship between signals Vcom1 and Vcom2, Yanagi specifically teaches away from signals Vcom1 and Vcom2 being **adjusted independently**. Thus, Yanagi fails to teach

a common electrode voltage supplying circuit **capable of respectively adjusting** the common electrode voltages so that the common electrode voltages are **adjusted independently for each group**, as claim 1 requires. Nomura likewise fails to teach this limitation. Consequently, neither Yanagi, nor Nomura, alone or in combination, teach each of the limitations of claim 2 as is required to support a rejection under §103.

Additionally, Applicants specifically address claims 10 and 13. Claims 10 and 13 further describe supplying a common electrode voltage in a manner not described in either Yanagi or Nomura. Consequently, neither Yanagi, nor Nomura, alone or in combination, teach each of the limitations of either of claims 10 and 13 as is required to support a rejection under §103.

Therefore, Applicants respectfully request the rejection of claims 1, 2, 6, 8, 10, 12, 13, 21, 28 and 35 under 35 U.S.C. § 103(a) be withdrawn.

**Claim Rejections – 35 U.S.C. § 103 - Yanagi and Nomura in view of Tomita**

Claims 3-5, 7, 9, 11 and 16-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagi and Nomura, and further in view of Tomita et al. (US 5,686,932, hereinafter “Tomita”).

The deficiencies of Yanagi and Nomura are discussed above and are relevant here as well because claims 3-5, 7, 9, 11, 14 and 16-18 depend from claim 1. Tomita fails to remedy these deficiencies. Accordingly, at least by virtue of their dependence from claim 1, none of Yanagi, Nomura and Tomita, alone or in combination, teach each of the limitations of any of claims 3-5, 7, 9, 11, 14 and 16-18 as is required to support a rejection under §103.

Additionally, Applicants specifically address claims 11, 14, 16-18. Claims 11, 14, 16-18 further describe supplying a common electrode voltage in a manner not

described in any of Yanagi, Nomura or Tomita. Consequently, none of Yanagi, Nomura, and Tomita, alone or in combination, teach each of the limitations of any of claims 11, 14, 16-18 as is required to support a rejection under §103.

Therefore, Applicants respectfully request the rejection of claims 3-5, 7, 9, 11, 14 and 16-18 under 35 U.S.C. § 103(a) be withdrawn.

**Claim Rejections – 35 U.S.C. § 103 – Yanagi, Nomura, and Tomita in view of**

**Nakao**

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagi and Nomura as modified by Tomita in view of Nakao et al. (US 2001/0003431, hereinafter “Nakao”).

The deficiencies of Yanagi, Nomura and Tomita are discussed above and are relevant here as well because claim 20 depends from claim 1. Nakao fails to remedy these deficiencies. Accordingly, none of Yanagi, Nomura, Tomita, and Nakao, alone or in combination, teach each of the limitations of claim 20 as is required to support a rejection under §103.

Therefore, Applicants respectfully request the rejection of claim 20 under 35 U.S.C. § 103(a) be withdrawn.

**Claim Rejections – 35 U.S.C. § 103 – Yanagi and Nomura in view of Nakao**

Claims 22-27, 29, 30-34 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yanagi and Nomura in view of Nakao.

The deficiencies of Yanagi, Nomura and Nakao are discussed above and are relevant here as well because claims 22-27 depend from claim 1 and claims 29, 30-34 and 36 depend from claim 28. Accordingly, none of Yanagi, Nomura and Nakao, alone

or in combination, teach each of the limitations of any of claims 22-27, 29, 30-34 and 36 as is required to support a rejection under §103.

Further, Applicants specifically address claim 29. The deficiencies of Yanagi and Nomura were discussed above with respect to claim 2 and are relevant here because claim 29 contains limitations at least somewhat similar to those of claim 2. Nakao fails to remedy these deficiencies. Accordingly, none of Yanagi, Nomura, and Nakao, alone or in combination, teach each of the limitations of claim 29 as is required to support a rejection under §103.

Additionally, Applicants specifically address claims 26, 30 and 31. Claims 26, 30 and 31 further describe supplying a reference electrode voltage in a manner not described in any of Yanagi, Nomura or Nakao. Consequently, none of Yanagi, Nomura, and Nakao, alone or in combination, teach each of the limitations of any of claims 26, 30 and 31 as is required to support a rejection under §103.

Additionally, Applicants specifically address claims 27, 32 and 33. Claims 27, 32 and 33 further describe supplying a common electrode voltage in a manner not described in any of Yanagi, Nomura or Nakao. Consequently, none of Yanagi, Nomura, and Nakao, alone or in combination, teach each of the limitations of any of claims 27, 32 and 33 as is required to support a rejection under §103.

Therefore, Applicants respectfully request the rejection of claims 22-27, 29, 33, 34 and 36 under 35 U.S.C. § 103(a) be withdrawn.



**CONCLUSION**

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-14 and 16-36 in connection with the present application is earnestly solicited.

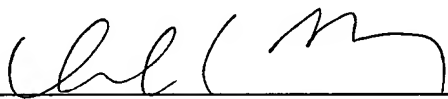
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKY, & PIERCE, P.L.C.

By

  
Donald J. Daley, Reg. No. 34,313

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

DJD/JHA: tlt